

ATTACHMENT A: SUMMARY OF PUBLIC COMMENT AND STAFF RESPONSES

Chickahominy Power, LLC (GW0078700) Application for Groundwater Withdrawal Summary of and Response to Public Comments

Public Comment Period: December 26, 2019 through February 14, 2020

Public Hearing: 6:30 p.m. on January 28, 2020 at Charles City County High School

There were 36 oral comments received during the public hearing. Not all in attendance signed up to speak.

In addition, 1,366 written public comments were received, for a total of 1,402 public comments. 1,199 individuals participated in the joint public comment and public hearing process.

ALTERNATIVE SOURCES

COMMENT: Chickahominy Power, LLC and the Department have failed to demonstrate that the New Kent County alternative is impracticable.

RESPONSE: DEQ has demonstrated during its prior technical evaluation for the New Kent County water withdrawal permit that the New Kent County water source is a practicable alternative once it is connected to the plant within 7 years. The future availability of that supply to the applicant is one of the key points noted in limiting the duration of withdrawal from the Potomac Aquifer to only that period of time needed to establish the water supply connection to New Kent County.

COMMENT: Chickahominy Power, LLC and the Department have failed to demonstrate that a surface water alternative is impracticable.

RESPONSE: The Groundwater Withdrawal Regulation at 9VAC25-610-10 defines "Practicable." Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. Chickahominy Power, LLC originally considered using conventional evaporative cooling technologies (wet cooling towers) and projected a use of approximately 14.4 million gallons of water per day (or 5.2 billion gallons of water per year) for evaporation and blow-down. The environmental impacts associated with construction of the necessary surface water intake, supply and discharge pipelines to and from the facility, and the wastewater that would have been discharged into the James River exceeded the environmental impacts associated with a groundwater withdrawal source. Additionally, the Virginia Institute of Marine Science has expressed previous concerns about additional surface water withdrawals in this portion of the James River and the impact that it could have on oyster larva and endangered sturgeon. The costs and timing were also not consistent with the applicant's overall project purpose.

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COMMENT: Chickahominy Power, LLC and the Department improperly limit their analysis to alternative water sources for the present Chickahominy site, failing to consider practicable, alternative sites for the facility.

RESPONSE: Groundwater Withdrawal Regulation 9VAC25-610-102 provides the criteria for evaluation of need for the withdrawal and alternatives. The evaluation criteria does not include analysis of alternative sites for the facility, only alternative sources of water supply. The Act does not authorize DEQ or require the applicant to evaluate alternative locations for proposed groundwater withdrawals.

COMMENT: Viable alternative water sources will be available in 7 years.

RESPONSE: Chickahominy Power, LLC has provided documentation of an alternative potable water supply through an agreement with New Kent County. However, the infrastructure to provide that water to the Chickahominy Power, LLC facility in Charles City County is currently not in place. Chickahominy Power, LLC has provided DEQ a timeline for obtaining easements and permits, and construction of a 5-mile pipeline that would be completed within 7 years. The New Kent County alternative water source, once established within 7 years, is one of the key points noted in limiting the duration of withdrawal from the Potomac Aquifer to only that period of time projected to establish the water supply connection to New Kent County.

COMMENT: Chickahominy Power, LLC holds a contract to receive already permitted water withdrawals from the County of New Kent. There is no specified contract renewal option and this agreement expires April 30, 2024. This is less than the potential special exception termination date.

RESPONSE: On February 4, 2020, during the public comment period, Mr. Jef Freeman, Jr. representing Chickahominy Power, LLC provided a copy of an Amendment to Potable Water Supply Agreement signed by Wanda F. Watkins, Deputy Clerk of the Board of Supervisors, New Kent County. At its January 29, 2020 meeting, the Board of Supervisors (New Kent County) approved an amendment to the potable water supply agreement dated April 24, 2019 between New Kent County and Chickahominy Power. The Amendment deleted both appearances of April 30, 2024, and replaced them with April 30, 2027, in Section 2 C (Term of Agreement; Commence Date; Termination).

COMMENT: Chickahominy Power states they need 2.5 million gallons per month, but does not ever state that the water needs to be potable.

RESPONSE: The applicant states in a February 25, 2019 submittal that the “the plant requires highly purified demineralized water for the steam cycle. The evaporative cooling system requires water quality that is typical of potable sources.” The applicant also provided the manufacturer’s recommended standards for water quality of make-up and circulation water to the evaporative

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cooler. The need for higher quality water is a result of choosing a high efficiency water use technology.

COMMENT: Commenters raised concerns that the proposal to connect the Chickahominy Power plant to the New Kent Water Supply in the future essentially allows the owner to permanently purchase water withdrawn from the Potomac aquifer.

RESPONSE: As New Kent County is currently withdrawing groundwater from the Potomac Aquifer and has sufficient permitted capacity to supply Chickahominy Power, LLC. Connecting to this system would not result in an additional long-term allocation from the Potomac Aquifer. Additionally, on December 1, 2018, New Kent County was issued a permit from DEQ to obtain surface water (Virginia Water Protection Permit No. 16-0763) from the Pamunkey River to reduce New Kent County's reliance upon only groundwater. Once complete, this system will further reduce overall long term demand on the Potomac Aquifer as New Kent County becomes a conjunctive use system. This is a viable long-term alternative for Chickahominy Power, LLC, and they are required to implement this connection.

TECHNICAL EVALUATION

COMMENT: The technical evaluation provided by DEQ in the Draft Special Exception is an insufficient basis for determining the potential effects of this withdrawal on the Potomac Aquifer.

COMMENT: This exception would place an excessive risk to our water security by (1) declining groundwater levels and loss of artesian characteristics (2) increased potential for saltwater intrusion from gradient reversal and upcoming (3) accelerated rates of land subsidence, and (4) irreversible loss of long-term aquifer storage.

RESPONSE: The Groundwater Withdrawal Regulations (9VAC25-10-110 D) provides that for a permit to be issued for a new withdrawal a technical evaluation shall be conducted. The evaluation determines:

- 1) The Area of Impact (AOI), or the areal extent of each aquifer where one foot or more of drawdown is predicted to occur as a result of the proposed withdrawal.
- 2) Water Quality, or that the potential for the proposed withdrawal to cause salt water intrusion into any portions of any aquifers or the movement of waters of lower quality to areas where such movement would result in adverse impacts on existing groundwater users of the groundwater resource as per 9VAC25-610-110 D 2, and
- 3) The Eighty Percent Drawdown (80% Drawdown) or that the proposed withdrawal in combination with all existing lawful withdrawals will not lower water levels, in any confined aquifer that the withdrawal impacts, below a point that represents 80% of the distance between the land surface and the top of the aquifer at the points where the one-foot drawdown contour is predicted for the proposed withdrawal as per 9VAC25-610-110 D 3 h.

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To perform the technical evaluations, DEQ uses a state of the art regional groundwater model (VAHydroGW-VCPM) which encompasses all of the Coastal Plain within Virginia and parts of the Coastal Plain in northern North Carolina and southern Maryland. The United States Geological Survey (USGS) created the original version of this groundwater model and USGS continues to collaborate with DEQ on updating and refining the model as new data become available. The most recent update occurred in 2019. DEQ has a high degree of confidence in the predictive ability of the model based on information collected by both DEQ and the USGS from groundwater monitoring wells throughout the Eastern Virginia Groundwater Management Area. In addition, in modeling proposed withdrawals over the simulation period, DEQ uses the maximum permitted amount every day for the proposed withdrawal and all other permitted withdrawals (for Chickahominy Power, LLC the simulation period was 7 years).

In some cases, the impacts from a withdrawal are so small that they are undetectable in a regional model such as VAHydroGW-VCPM. In those cases, DEQ has additional analytical tools available to look at impacts at a finer scale.

As provided in the Technical Evaluation documentation, the evaluation of the magnitude of the proposed 7-year withdrawal does not allow for the assessment of the AOI using the VAHydroGW-VCPM, as the maximum simulated drawdown was less than one foot. To provide an additional layer of protection, DEQ also calculated the AOI using the Hantush and Jacob 2-dimensional analytical solution for leaky, confined aquifers. The results of the analysis indicated a one-foot drawdown at a maximum radius of approximately 540 feet from each proposed production well. As shown in the Technical Evaluation, the AOI extends slightly beyond the Chickahominy Power, LLC property, onto two adjacent properties, but no further. The two properties are the Virginia Natural Gas, Inc. property at 6841 Chambers Road, Charles City County, and the BHBH, LLC property at 6740 Chambers Road, Charles City County. There are no existing permitted wells within the simulated AOI.

The regional model (VAHydroGW-VCPM) does not indicate any changes to the regional flow patterns that would lead to reduced water quality from up-coning or lateral saltwater intrusion.

Similar to the AOI, the 80% drawdown criterion was evaluated using both the VAHydroGW-VCPM and the Hantush-Jacob analytical simulation. A base model simulation was developed (excluding the Chickahominy Power LLC applicant's request) to predict the impacts from all existing permits operating at their maximum permitted withdrawal limits. The base simulation was executed for 7 years (the length of the groundwater withdrawal) using the 2018 total permitted pumping rates and 2017 simulated reported use water levels as starting conditions. A second simulation for the applicant's withdrawal was conducted using the 2D Hantush-Jacob analytical simulation to simulate drawdown resulting from the applicant wells. The maximum resulting drawdown at the wellhead is 2.3 feet and the water level in the Potomac aquifer is not simulated to fall below the critical surface.

Based on the technical evaluation as summarized above, the withdrawal requested by the Chickahominy Power, LLC satisfies the technical evaluation criteria.

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COMMENT: I am a life-long Charles City County resident and I am very concerned about the prospect of another gas plant being built within one mile of the C4GT Power Plant. We are very concerned about our water and the amount these two gas power plants are planning to take from our surface water and the Potomac Aquifer, our only source of water.

RESPONSE: The C4GT, LLC received a Virginia Water Protection (VWP) Individual Permit #16-1604 on August 30, 2017 for the maximum annual withdrawal of 2.709 billion gallons from the James River. However, the C4GT, LLC permit does not fall within the scope of the public comments concerning the Chickahominy Power, LLC groundwater withdrawal.

The Chickahominy Power, LLC draft groundwater withdrawal special exception would allow for the annual maximum withdrawal of 30 million gallons from the Potomac Aquifer, for a duration of time not to exceed 7 years. The withdrawal requested by Chickahominy Power, LLC satisfies the technical evaluation criteria for permit issuance.

In evaluating groundwater permit applications, as provided in § 62.1-263 of the Code of Virginia, the Board shall ensure that the maximum possible safe supply of ground water will be preserved and protected for all other beneficial uses. The technical evaluation ensures that the maximum possible safe supply for ground water will be preserved based on the criteria defined in the groundwater withdrawal regulation. The proposed groundwater use is a beneficial use as defined in § 62.1-255 of the Ground Water Management Act of 1992, which includes domestic (including public water supply), agricultural, commercial, and industrial uses.

COMMENT: Commenters expressed a concern that substantially lower water levels may occur in neighboring wells that may not be reflected in DEQ modeling.

RESPONSE: While models seldom conform exactly to reality, we have not found this model to deviate from monitored conditions in dramatic ways. The results of the modeling for the proposed withdrawal indicated negligible impacts to water levels in the Potomac Aquifer. The proposal was actually evaluated using three different methods to triangulate our understanding of the potential water level decline from this proposal. Less than 3 feet of additional drawdown is expected over the course of the withdrawal period, and the Area of Impact (AOI) where the withdrawal is predicted to result in at least one foot of drawdown extends radially for only 540 feet from each production well. Only two properties include (small) portions of the AOI; these are the Virginia Natural Gas, Inc. property at 6841 Chambers Road, Charles City County, and the BHBH, LLC property at 6740 Chambers Road, Charles City County. At the end of the 7-year period of the groundwater withdrawal, the AOI will decrease as the aquifer will rebound and water levels will increase in the localized AOI.

MITIGATION PLAN

COMMENT: The mitigation plan does not provide enough protection for residents and that citizens would not have the means to challenge industry if their wells are impacted.

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COMMENT: How do we officially protect ourselves in order to provide necessary legal documentation (in the event that we must prove that our well contamination is caused by the power plant)? Do we have to pay for the documentation?

RESPONSE: Based on the technical evaluation, the AOI for the Chickahominy Power, LLC proposed withdrawal extends radially for only 540 feet from each production well. While the AOI does extend off the Chickahominy Power, LLC property, the two adjacent properties that include small portions of the AOI are non-residential, namely the Virginia Natural Gas, Inc. property at 6841 Chambers Road, Charles City County, and the BHBH, LLC property at 6740 Chambers Road, Charles City County. No residential properties have been identified within the AOI.

As specified in 9VAC25-610-110 D 3 g, withdrawals by an applicant with an Area of Impact (AOI, or the area where the withdrawal is predicted to result in at least one foot of drawdown) that does not remain on the property owned by the applicant shall provide and implement a plan to mitigate all adverse impacts on existing groundwater users. The regulation states that “[A]pprovable mitigation plans shall, at a minimum, contain the following features and implementation of the mitigation plan shall be included as enforceable permit conditions:

- (1) The rebuttable presumption that water level declines that cause adverse impacts to existing wells within the area of impact are due to the proposed withdrawal;
- (2) A commitment by the applicant to mitigate undisputed adverse impacts due to the proposed withdrawal in a timely fashion;
- (3) A speedy, nonexclusive, low-cost process to fairly resolve disputed claims for mitigation between the applicant and any claimant; and
- (4) The requirement that the claimant provide documentation that he is the owner of the well; documentation that the well was constructed and operated prior to the initiation of the applicant's withdrawal; the depth of the well, the pump, and screens and any other construction information that the claimant possesses; the location of the well with enough specificity that it can be located in the field; the historic yield of the well, if available; historic water levels for the well, if available; and the reasons the claimant believes that the applicant's withdrawals have caused an adverse impact on the well.

The applicant used the DEQ boilerplate mitigation plan that addresses these conditions. The mitigation plan is incorporated by reference as an enforceable condition of the permit.

A fact sheet has been developed that outlines the general requirements for the mitigation process.

USE OF SPECIAL EXCEPTION

COMMENT: The Special Exception is contrary to the purpose of the Groundwater Management Act.

COMMENT: DEQ failed to state a sufficient basis for the issuance of the Draft Special Exception.

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RESPONSE: The purpose of the Ground Water Management Act of 1992 (§§ 62.1-254 et seq. of the Code of Virginia) is to recognize and declare that in order to conserve, protect and beneficially utilize the ground water of this Commonwealth and to ensure the public welfare, safety and health, provision for management and control of ground water resources is essential.

Furthermore, the Ground Water Management Act of 1992 also includes § 62.1-267 of the Code of Virginia, issuance of special exceptions, which provides that the Board may issue a special exception to allow the withdrawal of ground water in the case of an unusual situation in which requiring the user to obtain a water withdrawal permit would be contrary to the intended purpose of the Act. As provided in § 62.1-255 of the Ground Water Management of 1992, beneficial use includes domestic (including public water supply), agricultural, commercial, and industrial uses. The draft groundwater withdrawal special exception provided for Chickahominy Power, LLC in Charles City County is for an industrial use, which is explicitly defined as a beneficial use in the Ground Water Management Act of 1992.

DEQ's rationale for issuing a groundwater withdrawal special exception (§ 62.1-267 of the Code of Virginia) was that eliminating any potential future use of the Potomac aquifer for human consumption in the area of the withdrawal through the issuance of a groundwater withdrawal permit would be contrary to the Act because of the potential impact on public health and the environment (aquifer) over the long-term. The use of a non-renewable special exception limited the duration of the withdrawal and would be a bridge to an alternative source of supply from New Kent, which, if interconnected, would benefit the environment (aquifer) over the long term. In response to the use of the special exception, the applicant reduced the overall amount of the withdrawal volume from 106 MGY to 30 MGY by evaluating and committing to innovative cooling technologies, and entered into a contract with New Kent County to establish an alternative water supply and connection.

In addition, DEQ's rationale was based on the fact that DEQ had no past precedent for issuing a groundwater withdrawal permit for less than the statutory maximum term or issuing a groundwater withdrawal permit with a special condition prohibiting renewal upon expiration of the permit. While § 62.1-266 A of the Code of Virginia gives the Board broad discretion in establishing permit conditions, DEQ was concerned that this could be seen as contrary to § 62.1-266 C, which provides that "the permit shall expire at the end of the term unless a complete application for a new permit has been filed in a timely manner as required by the regulations of the Board, and the Board is unable, through no fault of the permittee, to issue a new permit before the expiration date of the previous permit." Also, 9VAC25-610-96 A of the regulation establishes the permit holder's duty to reapply and a request could be made to administratively continue the permit.

Upon review of public comments and the arguments presented concerning use of the groundwater withdrawal special exception instead of a groundwater withdrawal permit, DEQ agrees that the proposed activity may not be contrary to the Act and sufficiently unusual. In addition, DEQ has determined that the § Va. Code § 62.1-266 (A) provides the Board with requisite authority to limit the term of a permit to a period less than 15 years and eliminate the possibility of an administrative continuance. Since the groundwater withdrawal special exception for Chickahominy Power, LLC was processed following the same regulatory requirements for, and includes the same conditions as, a

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groundwater withdrawal permit, a non-renewable, 7-year, groundwater withdrawal permit for Chickahominy Power, LLC may be issued pursuant to § 62.1-266 A of the Code of Virginia.

The draft groundwater withdrawal permit includes the same conditions that were presented to the public as part of the draft special exception, and includes a special condition in Part II that authorizes the withdrawal of groundwater for a term not to exceed 7 years or completion of an interconnection to the New Kent County Public Water Supply System, whichever comes first, and a provision that, notwithstanding Va. Code § 62.1-266(C) or any provision of the Board's Regulations, including 9 VAC 25-610-96, the permit will not be administratively continued under any circumstances.

COMMENT: Has the DEQ ever closed a facility that had a special exception permit and continued pumping from the aquifer after the permit expired?

RESPONSE: Recipients of previously issued groundwater withdrawal special exceptions have complied with the requirements of those special exception provisions, including cessation of the groundwater withdrawal on or before the termination date.

GROUNDWATER MANAGEMENT

COMMENT: Issuing a groundwater withdrawal permit for an industrial use from the taxed Potomac Aquifer sets poor groundwater management policy in the Commonwealth.

RESPONSE: As a matter of policy, groundwater withdrawals are managed on a first come, first served basis since the establishment of the program. DEQ has acted proactively to manage Potomac aquifer conditions. The over allocation that is referenced in this comment is not based on current use. It was the result of maximum withdrawal modeling for fifty years into the future. The steps taken by DEQ to reduce these demands will allow these levels to stabilize over time. The small size of this withdrawal will not have a significant effect on long term Potomac aquifer water levels and, once connected to New Kent County, the impact is even less. New Kent County is already in the baseline simulation, which reduces the additional effect of the withdrawal even further once the system becomes conjunctive. As provided in § 62.1-255 of the Groundwater Management of 1992, beneficial uses include domestic (including public water supply), agricultural, commercial, and industrial uses. The draft groundwater withdrawal permit provided for Chickahominy Power, LLC in Charles City County is for an industrial use, a beneficial use as defined in the Ground Water Management Act of 1992. To limit the duration in time for a groundwater withdrawal from the Potomac Aquifer, remove the ability of the withdrawer to reapply for a groundwater withdrawal permit, and to remove eligibility for an administrative continuance of an existing permit, DEQ tentatively issued a draft special exception instead of a permit (as provided for by § 62.1-267 of the Code of Virginia). In response to public comment, the special exception was changed to a traditional withdrawal permit but it continues the special condition to connect to New Kent and the 7-year expiration date.

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COMMENT: There are 334 groundwater extraction permits currently listed for the Piedmont Region of DEQ. Of the 334 permits, 61 or 18% are still removing groundwater with expired permits, one going back to 2008. Most of the expired permits relate to municipal water supplies. There are two municipal water supplies with expired permits in Charles City County that date back to 2010 and 2011. In 7 years when the special use permit expires, is Chickahominy Power going to be allowed to keep on extracting groundwater because of DEQ staff shortages?

RESPONSE: There are 369 active groundwater withdrawal permits in the Commonwealth of Virginia, of which, 269 are within the Eastern Virginia Groundwater Management Area (EVGMA). The EVGMA encompasses the counties of Charles City, Essex, Gloucester, Isle of Wight, James City, King George, King and Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northumberland, Prince George, Richmond, Southampton, Surry, Sussex, Westmoreland, and York; the area of Caroline, Chesterfield, Fairfax, Hanover, Henrico, Prince William, Spotsylvania, and Stafford counties east of Interstate 95; and the cities of Chesapeake, Franklin, Hampton, Hopewell, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg.

As provided by 9VAC25-610-96, any permittee with any effective permit shall submit a new permit application at least 270 days before the expiration date of an effective permit. If a complete application for a new permit has been filed in a timely manner, and the board is unable, through no fault of the permittee, to issue a new permit before the expiration date of the previous permit, then the permit may be administratively continued. There are 44 permits within the EVGMA that have been administratively continued and continue groundwater withdrawals in accordance with the most recent permit issued for each permittee. Administratively continued permittees are still valid, are subject to the provisions of the Ground Water Management Act of 1992 and the Groundwater Withdrawal Regulations and are subject to compliance inspections and enforcement actions if a violation occurs.

The administrative continuance provision only applies to groundwater withdrawal permits, but not to groundwater withdrawal special exceptions. Special exceptions cannot be administratively continued and expire at the end of their term. In response to public comment, the special exception was changed to a groundwater withdrawal permit. However, a special condition is included that eliminates the ability to renew or continue the permit beyond 7 years.

COMMENT: The Board's evaluation of the Draft Special Exception should be guided by the evaluation criteria in 9VAC25-610-110.

RESPONSE: Pursuant to 9VAC25-610-190 B, the Board may require any criteria described in 9VAC25-610-110 to be included within a special exception. The draft groundwater withdrawal special exception for Chickahominy Power, LLC was reviewed using all of the criteria from 9VAC25-610-110 as would have been done for a groundwater withdrawal permit. In developing the special exception for this facility, DEQ did use the evaluation criteria found in 9VAC25-610-110. Specifically, 9VAC25-610-110 A requires minimization of the withdrawal volume commensurate with the proposed beneficial use. The applicant originally proposed a withdrawal

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of 106 million gallons per year using a traditional cooling technology. During the course of the review process, this withdrawal volume was reduced substantially to 30 million gallons per year through the proposed use of an innovative water saving cooling technology which is below industry standards for water use. Staff believe this volume represents the minimum amount of water that can be applied to the proposed beneficial use. Subsections B and C of 9VAC25-610-110 do not apply as this is a new withdrawal. The proposal, in the form of this draft authorization complies with all criteria of 9VAC25-610-110 D 1-3 as demonstrated by the fact sheet, technical evaluation, local government certification, water conservation and management plan, and mitigation plan. The other factors listed in 9VAC25-610-110 D 4 were also evaluated:

- a. The nature of the use of the proposed withdrawal. The proposed withdrawal is not wasteful and represents a low volume of water for the proposed beneficial use. The volume is comparable to an 18-hole irrigated golf course, 100 acres of irrigated agriculture, or a 300 unit subdivision. The proposed withdrawal is temporary and the facility is under contract to connect to a permitted conjunctive use system in New Kent County.
- b. The public benefit provided by the proposed withdrawal. According to the final order of the State Corporation Commission (SCC) approved May 8, 2018, the SCC found that the record supports a finding that the Facility is not "contrary to the public interest" as contemplated by § 56-580 D of the Code. Among other things, "the record in this case establishes that construction and operation of the proposed Facility will: (i) enhance reliability; (ii) provide local and regional economic benefits; and (iii) comply with all necessary federal, state and local environmental permits." The SCC also found "that the proposed Facility will likely generate direct and indirect economic benefits to Charles City County and the Commonwealth as a result of employment and spending from construction and operation of the proposed Facility. The Facility is projected to create 800-1,000 jobs during the construction period and thereafter approximately 35-40 full-time jobs. Further, Charles City County will likely benefit from an increase in the local tax base as a result of the property and generation facilities constructed..."
- c. The proposed use of innovative approaches such as aquifer storage and recovery systems, surface water and groundwater conjunctive use systems, multiple well systems that blend withdrawals from aquifers that contain different quality groundwater in order to produce potable water, and desalinization of brackish groundwater. The applicant has entered into a contract to connect to New Kent County Public Water Supply System. This system is permitted as a conjunctive use system that will use surface and groundwater over the long term reducing overall reliance on groundwater. The other listed "innovative" approaches have associated water quality versus cost trade-offs that were determined by the applicant to be impracticable for the project.
- d. Prior public investment in existing facilities for withdrawal, transmission, and treatment of groundwater. Charles City County does not currently operate a county-wide public water system. They have several small groundwater systems without any meaningful excess capacity: two are for neighborhood residential systems (Mt. Zion and Wayside), a school system that also irrigates ball fields, and Roxbury Industrial Park. The county's limited

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debt capacity and small tax base have limited the development of larger water systems. However, the proposal is for temporary self-supplied use followed by use of the New Kent County public system for the long-term water supply, which is under contract.

e. Climatic cycles. The 7-year permit term limits the significance of climate cycles on groundwater and groundwater availability. Further, there is consensus among the various climate models that Virginia will see higher amounts of precipitation, which is expected to result in greater aquifer recharge.

f. Economic cycles. Does not apply to this situation.

g. The unique requirements of nuclear power stations. Does not apply to this situation.

h. Population and water demand projections during the term of the proposed permit. Does not apply to this situation.

i. The status of land use and other necessary approvals. DEQ received the completed local government certification that the facility had all its local approvals and is consistent with local ordinances.

j. Other factors that the board deems appropriate.

Based on the reduced volume of groundwater requested, there is no existing conflict to invoke 9VAC25-610-110 E. There are not any other proposed permits under review at this time in that cannot be met as a result of this proposed withdrawal. The criteria in 9VAC25-610-110 F does not apply to new withdrawals.

COMMENT: If the Special Exception is issued for 7 years, it does not prevent Chickahominy Power, LLC from applying for a groundwater withdrawal permit or another special exception at a later date.

RESPONSE: Any person may apply or reapply for a groundwater withdrawal permit or apply for a groundwater withdrawal special exception at any time. Section 62.1-255 of the Ground Water Management Act of 1992 provides that a person means any and all persons, including individuals, firms, partnerships, associations, public or private institutions, municipalities or political subdivisions, governmental agencies, or private or public corporations organized under the laws of the Commonwealth or any other state or country. Applicant, as defined in Groundwater Withdrawal Regulation 9VAC25-610-10, means a person filing an application to initiate or enlarge a groundwater withdrawal in a groundwater management area. The Ground Water Management Act of 1992 and the Groundwater Withdrawal Regulations therefore do not prohibit any person from submitting an application for a groundwater withdrawal.

DEQ tentatively issued a draft 7-year special exception (as provided for by § 62.1-267 of the Code of Virginia) to limit the duration in time for a groundwater withdrawal from the Potomac Aquifer, remove the ability of the withdrawer to reapply for a groundwater withdrawal permit, and to remove eligibility for an administrative continuance of an existing permit, while at the same time

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ensuring that the withdrawal is subject to the same provisions and requirements as a groundwater withdrawal permit (9 VAC 25-610-190 B). With DEQ's decision to change the withdrawal authorization from a special exception to a permit in response to comment, the draft groundwater withdrawal permit includes a special condition limiting the permit term to 7 years or the date of interconnection to the New Kent County Public Water Supply System, whichever comes first.

COMMENT: Because Chickahominy's plant is unneeded and will not benefit Virginia or Virginians, its withdrawal is not for a "beneficial use."

RESPONSE: As provided in § 62.1-255 of the Groundwater Management of 1992, beneficial uses include domestic (including public water supply), agricultural, commercial, and industrial uses. The basis of 'need' for any beneficial use, as described in the comment is not within the parameters of review as provided by the Ground Water Management Act of 1992 or the Groundwater Withdrawal Regulations. The evaluation conducted is to determine if the amount of water proposed for withdrawal represents the minimum amount necessary for, in this case, the beneficial use, a gas fired power plant.

COMMENT: Has the Eastern Virginia Groundwater Management Advisory Committee (EVGWAC) been consulted on this project since their job is to monitor the groundwater?

RESPONSE: The Eastern Virginia Groundwater Management Advisory Committee (Committee) was established pursuant to 2015 Va. Acts Chs. 262 and 613. The Committee was directed by the legislative acts establishing it to report the results of its examinations and related recommendations by August 1, 2017, and the legislative acts establishing the Committee provided that the provisions of the acts, including those that established the Committee, shall expire on January 1, 2018.

ENVIRONMENTAL JUSTICE COMMENTS

COMMENT: The Department has failed to conduct a proper environmental justice analysis as required by Virginia law and applicable precedent.

RESPONSE: The General Assembly has determined that, provision for management and control of ground water resources is essential, "in order to conserve, protect and beneficially utilize the ground water of this Commonwealth..." Va. Code § 62.1-254. In furtherance of this finding, the General Assembly has vested Board with authority to, among other things, establish ground water management areas when certain conditions are met, see Va. Code § 62.1-257, and to issue ground water withdrawal permits in accordance with regulations adopted by the Board. See Va. Code § 62.1-256(1).

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“When reviewing an application for a permit to withdraw ground water, or an amendment to a permit, the Board may consider the nature of the proposed beneficial use, the proposed use of alternate or innovative approaches such as aquifer storage and recovery systems and surface and ground water conjunctive uses, climatic cycles, unique requirements for nuclear power stations, economic cycles, population projections, the status of land use and other necessary approvals, and the adoption and implementation of the applicant’s water conservation and management plan. In no case shall a permit be issued for more ground water than can be applied to the proposed beneficial use.” Va. Code § 62.1-263.

“When proposed uses of ground water are in conflict or when available supplies of ground water are insufficient for all who desire to use them, preference shall be given to uses for human consumption, over all others.” Id.

Finally, “In evaluating permit applications, the Board shall ensure that the maximum possible safe supply of ground water will be preserved and protected for all other beneficial uses.” Id.

Some commenters assert that the Department failed to conduct a proper environmental justice assessment in this case. Environmental Justice has been defined as “the fair treatment and meaningful involvement of all people, regardless of race, color, faith, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”

The Department provided for the fair treatment and meaningful involvement of all people as follows. First, the Department evaluated the impacts to groundwater levels and supply and determined that it will not result in the disproportionate adverse impact on economically disadvantaged or minority communities. The notion of “harm” in this program is related to whether or not a proposed withdrawal will lower the groundwater levels within existing wells by at least one foot. Moreover, the regulation provides a remedy for actual documented adverse impacts to wells that occur in existing wells located within an AOI that extends off the property of the proposed well. The required mitigation plan provides this remedy. As provided in the Technical Evaluation documentation, the evaluation of the Area of Impact (AOI) analysis indicated a one-foot drawdown at a maximum radius of approximately 540 feet from each proposed production well. The AOI extends slightly beyond the Chickahominy Power, LLC property, onto two adjacent properties, but no further. The two commercial/industrial properties are the Virginia Natural Gas, Inc. pump station property at 6841 Chambers Road, Charles City County, and a construction company, the BHBH, LLC property at 6740 Chambers Road, Charles City County. According to an internet search, neither of these two properties is minority owned and there are no existing permitted wells within the simulated AOI whose water levels could be reduced by the proposed withdrawal. Consistent with long-standing program precedent and simulation of the physical properties of the aquifer at this location, water level reductions from the proposed withdrawal in wells outside of the AOI are not expected to be measurable and therefore have no “harm” to existing groundwater withdrawals and groundwater availability. Commenters did not identify any harm to any member of any community beyond general speculative harm caused to all users of the aquifer by any use of the resource or any minority or economically disadvantaged communities within the AOI. Given these facts, this action creates no disproportionate harm.

ATTACHMENT A: SUMMARY OF PUBLIC COMMENT AND STAFF RESPONSES

Regarding meaningful involvement, DEQ's Office of Water Supply staff participated in multiple public outreach events during the development and review of the draft groundwater withdrawal special exception documents in order to reach more communities during the decision-making processes. This included participating in the October 28, 2019 Town Hall meeting hosted by Charles City County's Board of Supervisors, hosting a public information session on December 5, 2019 at the Charles City County Social Hall in Charles City County, and hosting a public information session on January 23, 2020 at the Varina Library in Henrico County. In addition, DEQ posted online on the DEQ Website, Facebook, and on the Nextdoor app to increase awareness of the proposal and opportunities to obtain further information or to provide comment. All of these actions by DEQ exceed the regulatory requirements. DEQ staff received and responded to numerous inquiries from citizens concerning the Chickahominy Power, LCC groundwater withdrawal application from August through November 2019. Finally, DEQ Director Paylor approved a staff recommendation, pursuant to § 62.1-44.15:02 F of the Code of Virginia, that the Department convene a public hearing and issue a joint notice of public comment and public hearing on the draft groundwater withdrawal special exception for Chickahominy Power, LLC.

A public notice to seek public comment and announce a public hearing on a draft special exception from the State Water Control Board for the temporary withdrawal of groundwater in Charles City County, Virginia was advertised in the Richmond Times-Dispatch on December 26, 2019, and the New Kent-Charles City Chronicle on December 27, 2019. The materials associated with the public comment process were available on the DEQ Website beginning on December 6, 2019. The public comment period provided was for a period of 50 days. Both the availability of the materials and the 50 day comment period significantly exceed the minimum required 30 days. Additionally, in accordance with 9VAC25-610-250 B, DEQ sent a public notice and announcement of a public hearing to each local governing body located within the Eastern Virginia Groundwater Management Area and to representatives of the Chickahominy Indian Tribe, Chickahominy Indians Eastern Division, Upper Mattaponi Tribe, Nansemond Indian Nation, Pamunkey Indian Tribe, and Rappahannock Tribe. The advertised public comment period was December 26, 2019 through February 14, 2020. The public hearing was advertised and held at Charles City County High School at 10039 Courthouse Road, Charles City, VA on January 28, 2020 beginning at 6:30 p.m. The Hearing Officer for the public hearing was Mr. Robert Wayland of the State Water Control Board. The purpose of the public hearing was to obtain input from the public related to the draft special exception for the State Water Control Board to review. The public notice provided the special exception name, applicant name, address and special exception number, the name and location of the water withdrawal, the project description and affected area. The public notice also included instructions on how to comment. DEQ received more than 1,400 separate public comments submitted by 1,199 persons. Each of the comments received has been reviewed in full and summarized here.

To the extent commenters invite the State Water Control Board to revisit a decision rendered by another Board, it is beyond this Board's authority.

ATTACHMENT A: SUMMARY OF PUBLIC COMMENT AND STAFF RESPONSES

CLIMATE CHANGE

COMMENT: The Department and Chickahominy Power LLC have failed to evaluate potential impacts associated with climate change.

RESPONSE: DEQ has a high degree of confidence in the predictive ability of the groundwater model based on information collected by both DEQ and the U.S. Geological Survey from groundwater monitoring wells throughout the Eastern Virginia. In general, climate change is not expected to significantly affect confined groundwater systems except from changes to recharge rates and from surficial aquifer chloride contamination resulting from repeated inundation events. Climate models are consistently predicting that in the Mid-Atlantic, from Virginia and further north, there will be increases in annual precipitation. This increase in precipitation will likely increase recharge rates. Lateral saltwater intrusion from increased hydrostatic pressure associated with sea level rise is not expected to change the fundamental rates of lateral saltwater movement within the Potomac Aquifer as far inland as Charles City County.

COMMENT: DEQ should explain what temperature modeling Chickahominy Power LLC used to justify the reduction from 160 Million Gallons per year to 30 Million Gallons per year: Did the temperature modeling account for higher peak consumption and average temperature associated with climate change.

RESPONSE: In a September 2018 pre-application meeting, the applicant estimated a need for 106 million gallons per year, but later reduced the request in the application to 30 million gallons per year based on the efficiency of an available cooling technology. As explained by the applicant, the vast majority of water consumption is associated with the evaporative cooling system installed on the inlet of the gas turbines. This system improves efficiency and output during periods of high ambient temperatures (above 59 degrees). The applicant's initial estimate was based on the peak instantaneous consumption value, and mistakenly assumed the evaporative cooler use would occur year round. The current 30 million gallons per year value accounts for the variation in consumption due to the changes in ambient temperatures. The applicant also eliminated reverse osmosis technology from the design, eliminating the need to use and discharge water to reject dissolved solids in the demineralization process. This resulted in a reduction in water usage in the determination process by approximately 20%.

The applicant also provided a water balance diagram showing the amount of water required for the different processes within the power plant's operation. The diagram describes an average use of 57.1 gallons per minute and a peak use of 79.9 gallons per minute. The average use equates to approximately 30 million gallons per year.

Documentation provided to DEQ does not indicate if the applicant did or did not account for a higher peak consumption to account for climate change. However, under a 7-year timeframe, a substantially higher temperature range would not be expected. The groundwater withdrawal permit limits the withdrawals, even under a higher temperature scenario, to 30 million gallons annually and 3.5 million gallons per month. If the applicant exceeds these volumes, it would be subject to DEQ's compliance and enforcement authorities.

ATTACHMENT A: SUMMARY OF PUBLIC COMMENT AND STAFF RESPONSES

REQUESTS FOR ADDITIONAL PUBLIC HEARINGS

COMMENT: Request for a public hearing on the proposed special exception.

COMMENT: SELC, Concerned Citizens of Charles City County (C5), and Virginia Environmental Justice Collaborative (VEJC) request an additional public hearing for the proposed groundwater withdrawal special exception permit and subsequent environmental justice analysis for the facility, pursuant to 9 Va. Admin. Code §§ 25-230-40(B), 25-610-270(A) and Va. Code § 62.1-44.15.02.

RESPONSE: A public notice to seek public comment and announce a public hearing on a draft special exception from the State Water Control Board for the temporary withdrawal of groundwater in Charles City County, Virginia was advertised in the Richmond Times-Dispatch on December 26, 2019, and the New Kent-Charles City Chronicle on December 27, 2019. The materials associated with the public comment process were available on the DEQ Website beginning on December 6, 2019. The public comment period provided was for a period of 50 days. Both the availability of the materials and the 50-day comment period significantly exceed the minimum required 30 days. Additionally, in accordance with 9VAC25-610-250 B, DEQ sent a public notice and announcement of a public hearing to each local governing body located within the Eastern Virginia Groundwater Management Area and to representatives of the Chickahominy Indian Tribe, Chickahominy Indians Eastern Division, Upper Mattaponi Tribe, Nansemond Indian Nation, Pamunkey Indian Tribe, and Rappahannock Tribe. The advertised public comment period was December 26, 2019 through February 14, 2020. The public hearing was advertised and held at Charles City County High School at 10039 Courthouse Road, Charles City, VA on January 28, 2020 beginning at 6:30 p.m. The Hearing Officer for the public hearing was Mr. Robert Wayland of the State Water Control Board. Also, at the informational meeting on December 5 2019, DEQ announced the planned public comment period and public hearing dates and that the relevant permit documents would be available on the DEQ web site prior to the start of the public comment period for the public's information. The purpose of the public hearing was to obtain input from the public related to this special exception for the State Water Control Board to review. The public notice provided the special exception name, applicant name, address and special exception number, the name and location of the water withdrawal, the project description and affected area. The public notice also included instructions on how to comment. Standard procedures were followed and an additional public hearing was not scheduled.

DEQ received more than 1,400 separate public comments submitted by 1,199 individual commenters. It is not anticipated that given the volume of public comment that any new salient issues would be provided as a result of additional public hearings.

OTHER PUBLIC COMMENT TOPICS

The majority of public comment received were in opposition to the draft groundwater withdrawal special exception and the proposed Chickahominy Power Plant. Topics beyond the purview of the Groundwater Management Act of 1992 and the Groundwater Management Regulations are included below.

ATTACHMENT A: SUMMARY OF PUBLIC COMMENT AND STAFF RESPONSES

COMMENT: Will there be a depletion of property value as a result of the Areas of Impact that will occur? Does DEQ take property values this into consideration?

COMMENT: Charles City County 2013 Water Supply Management Plan Charles City County's demand is expected to exceed well capacity in 2040 at the Hideaway/Mt. Zion Rustic, the Schools Complex, Ruthville, and the Adkins Store neighborhood service areas by the year 2040. To allow ANY additional water withdrawal is being short sighted and risking the health and safety of the citizens of Charles City.

COMMENT: Residents close to the gas-fired power plants will be most at risk from air pollution, especially the elderly, children, and those with pre-existing conditions. The national standards for air pollution, while important, do not prevent short and long term health impacts on individuals exposed to air pollution.

COMMENT: The Virginia Air Pollution Board must assess the suitability of the site before granting an air quality permit.

COMMENT: The county will encounter traffic jams slowing school buses and emergency vehicles, increase road construction and repair costs, reductions in state support for school expenditures, years of increase police expenses and other costs. Nothing has been agreed about how the project developers will decommission the facility and restore the rural nature of the community.

COMMENT: Unless Chickahominy Power can produce a contract selling all, or a portion, of the capacity of its facility to another power producer in Virginia that would directly result in the retirement of coal-fired units in Virginia, it should not claim that its project would result in such a public benefit.

COMMENT: I am concerned about dangerous chemicals inherent in the fracking process being released into the groundwater. I am concerned about the significant amount of methane, a greenhouse gas, that fracking emits.

COMMENT: The cost of a groundwater withdrawal permit is \$9,000 regardless of how much groundwater is being extracted, and because of this there is no disincentive for reducing groundwater use. A sliding scale should be put into place based on the amount of groundwater being withdrawn so the biggest users pay the highest prices.

COMMENT: It would be irresponsible for DEQ to allow a fracked gas plant that will contribute to global warming to take critical water reserves that residents will need in the next few decades.

COMMENT: DEQ is also not considering the needed fracked gas infrastructure that will be needed by this gas plant or how it too will harm the region's waterways.

ATTACHMENT A: SUMMARY OF PUBLIC COMMENT AND STAFF RESPONSES

COMMENT: Comments were submitted concerning the wastewater treatment of the cooling water and the capacity of the Roxbury Wastewater Treatment Plant to receive wastewater from Chickahominy Power, LLC. One commenter expressed concern that the treated waste would be released into Possum Run, a tributary of the Chickahominy River and the James River.

COMMENT: Commenters questioned the necessity or justification for the power plant including discussions of economic benefits to Charles City County and the surrounding jurisdictions and overall energy production impacts.

COMMENT: Commenters raised concerns about the lack of enforcement shown in other permits issued by DEQ for groundwater withdrawals.

COMMENT: Commenters questioned whether other state agencies were consulted and stated that the project does not meet the requirements of Chapter 4.1 § 10.1-419 et seq. of Title 10.1 of the Code of Virginia that declared Lower James a historic river and that full consideration of a river's resources should be considered.

COMMENT: Multiple comments about runoff from the plant affecting wells, wastewater generation, kepone disturbance or other water pollution possibly generated by the plant.

ATTACHMENT B: INDIVIDUALS WHO PROVIDED PUBLIC COMMENTS GW0078700

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Alyssa Freeman
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Beth Mckenzie-Mohr
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ATTACHMENT B: INDIVIDUALS WHO PROVIDED PUBLIC COMMENTS GW0078700

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Jeanne Stanborough
Jeannine Leffel
Jeannine Uzel
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Jeffrey Diamond
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Kathie Hoekstra
Kathleen McLane
Kathleen Swartz
Kathleen Taylor
Kathleen Wurdeman
Kathryn Papp
Kathy Acord
Kathy Trimpi
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Katie Neal
Kay Ferguson
Kay Leigh Ferguson
Kay Sempel
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Leslie Lindsay Chiswell
Lessley Bulluck
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Lillian Charity
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ATTACHMENT B: INDIVIDUALS WHO PROVIDED PUBLIC COMMENTS GW0078700

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Lyn Larkins
Lynda A. Cooke
Lynda West
Lynn Godfrey
Lynn Gravelle
Lynn P. Wilson
Lynn Tesser
Lynne Euse
Lynne Hughes
Lyra Bartell
Maddy Todd
Madeleine Preiss
Madison Crouch
Madison Cummings
Mai Tran
Malgorzata Ruszkowska-Noon
Manilyn Karp
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Marcia Fairman
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Maria-Celeste Delgado-Librero
Marian Beth Beauchamp
Marianne Boyle
Marie Hyder
Marilyn Anderson
Marilyn Clark
Marilyn Drucker
Marilyn Lavernoch
Maris Mendez
Marjorie Baker
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Mark Edmunds
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Mark Gardner
Mark Halbig
Mark McCray
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Mary Baumeister
Mary Beets
Mary Bridle
Mary Chamberlayne
Mary Cunningham
Mary Finley-Brook
Mary Green
Mary Hanna
Mary Hard
Mary Helen Sullivan
Mary J. Sticks
Mary Katharine Froehlich
Mary Kulish
Mary Lou Burke
Mary Lou Ferralli
Mary Mabe
Mary Miller
Mary Paige Ambrose
Mary Paxton
Mary Pugh
Mary Stinnette
Mary Strauderman
Mary Talkington
Mary Totty
Mary Triola
Marya Fitzgerald
MaryBeth Coffey
Mary-Stuart Torbeck
Mason Manley

ATTACHMENT B: INDIVIDUALS WHO PROVIDED PUBLIC COMMENTS GW0078700

Name
Matt Scriven
Matthew Richmond
Maureen Webb
Megan Baker
Megan Stueber
Melanie Hardy
Melanie Roberts
Melinda Lewis
Melissa Caivano
Melissa Grimes
Melissa McKenney
Melissa Reisland
Melody Tennant
Melody Titus
Merrie Milner
Merrill Boone
Merry Outlaw
Merry Riser
Michael A. Brown
Michael Carter
Michael Cevallos
Michael Desplaines
Michael Fraser
Michael Jefferson
Michael Keegan
Michael King
Michael Kroener
Michael Love
Michael Manard
Michael Mcdermott
Michael Morency
Michael Pan
Michael Sobel
Michele Mattioli
Michelle Black
Michelle Dail
Michelle Duplissis
Mike Freeland

Name
Mike Henrietta
Mike Sims
Milan Mehta
Millicent Ladeur
Mindy Quigley
Miriam Brancato
Mitchell Stout
Monica Appleby
Monica Burgoon
Monica Lewis
Morris Meyer
Moses Lleva
Mr. & Mrs. Franklin Johnson
Mr. james zell
Mr. Jason Halbert
Mr. Steven Fischbach
Mrs. Theresa Morris
Ms. Victoria Higgins
Nadja Payne
Nan Rollison
Nancy Brown
Nancy Forster
Nancy Hess
Nancy L. Hatchett
Nancy Lawrence
Nancy Sopher
Naomi Thiers
Narmadha Somasundaram
Natalie and Jon DeBoer
Natalie Deboer
Natalie Fahmy
Natalie Pien
Nathan Arries
Nathan Shaw
Nelson Bailey
Newton Teichmann
Nhari Djan
Nicholas Gimbrone

Name
Nicole Bertrand
Nikki Tajder
Nina Kaplan
Norma Adkins
Norma Riley
O. Paulette
Oliver Leron
Otis Pauley
Paige Wesselink
Pam Gamlin
Pamela Ghee
Pamela Jones
Pamela Mullins
Pamela Pike
Pamela Townsend
Pamela Wood
Parker Agelasto
Paster F. Wayne Henley
Pastor Justin Moore
Pat Holbrook
Pat Petro
Patricia Breedlove
Patricia Dunne
Patricia Hatfield
Patricia Isaacs
Patricia Kadar
Patricia Kipps
Patricia Ponce
Patricia Wilson
Patrick Keating
Paul Fiscella
Paul McGraw
Paul Procopio
Paul Wilgus
Paul Yeakle
Paula Chow
Paulette Kaplan
Paulina Carrion

ATTACHMENT B: INDIVIDUALS WHO PROVIDED PUBLIC COMMENTS GW0078700

Name
Pauline Coderre
Peggi Mac Partin
Peggy Combs
Peggy Gilges
Peggy L. Hombs
Perry Cogburn
Peter Buck
Peter Egan
Peter Harnick
Peter Sayre
Peter Yadlowsky
Philip de Vos
Philip Horbert
Philip Skeen
Phoebe Guider
Phyllis White
Quentin Fischer
Rae Allen
Raleigh Cook, Jr.
Raleigh Cook, Sr.
Ralph Grove
Randy Lindstrom
Raymond M. Bailey, Jr.
Raymond Nuesch
Rebecca Keller
Rebecca Mcbarg
Rebecca Shealy
Rebecca Shkeyrov
Regina White
Reginald Brown
Rekha Nadkarni
Renee Grebe
Rev. Burrall A. Smith Jr.
Rev.Dr. Kenneth Varney
Rhonda Johnson
Rhonda Miles-Crump
Rhonda Turman
Rich Gregory

Name
Richard Birken
Richard Eggeling
Richard Graham
Richard Grauel
Richard Horwege
Richard McDonough
Richard Mcgrain
Richard McLane
Richard Rutherford
Richard Stafford
Richard Urban
Ridgelyk Copeland
Rita Butler
Rita Waine
Rob Roy
Robert and Lee Ann Kinzer
Robert and Pam Jiranek
Robert Anderson
Robert Gabay
Robert Jordan
Robert Keller
Robert Myers
Robert Poignant
Robert Pool
Robert Rhodes
Robert Root
Robert Shippee
Robert Walters
Roberta Cook
Roberta Dawson
Robin B. Carter
Robin Marcato
Robin Robichaux
Robin Swope
Robley Jones
Roger Eitelman
Ron Edwards
Ron Skinner

Name
Ronald Karpick
Ronna Gray
Ronnie Mabry Sr.
Rosemarie Sawdon
Roy M. White
Royal T. Washington, Sr.
Rpscoe A. White
Russ Hopler
Russ Ludwick
Russell Chisholm
Ruth Carlone
Ruth Christian
Ruth Grubb
Ruth Petzold
Ruth Roberts
Ruth Steenwyk
Ruth Wandem
Ruthann McDermott
Ryan Brown
Ryan Hershey
S. Whiteside
Sabrina Smith
Sallie Park
Sally Tucker
Sam Catron
Samantha Robinson
Sammy Polk
Samson Amusa
Samuel Bleicaer
Samuel Hathorn
Sandra Bailey
Sandra Howson
Sandra Taylor
Sandra Uribe
Sara Jobin
Sara Jones
Sara Lee
Sara Mauri

ATTACHMENT B: INDIVIDUALS WHO PROVIDED PUBLIC COMMENTS GW0078700

Name
Sara Rugg
Sarah Barber
Sarah Boyd
Sarah Lanzman
Sarah Richardson
Sarah Vickers
Sarah Windes
Satya Chase
Scott Burger
Scott Varney
Scott Ziemer
Seth Clinton Moore
Shabaka Moore
Shannon Radabaugh
Shannon Roth
Shannon Tausch
Shantia Cotman
Sharon Hurley
Sharon Renee Brown
Sharon T. Marrow
Sharon V. Ponton (Blue Ridge Environmental Defense League)
Shawn Kurtzman
Shawn Wozniak
Sheila Walters
Shelia Quiners
Shelley Kaufman-Young
Shelley P. Taylor
Shelley Sheehe
Shelly Wilkins
Sherri Hudson
Shirley Burt
Shirley Hottot
Shirley Jenkins
Shirley Midyette
Shirley Napps
Shirley Smith
Sofia Gilani

Name
Sophia Edwards
Sophie Schneider
Stacy Lovelace
Stacy Miller
Stanley Naimon
Steffanie Aubuchon
Stephanie Buresh
Stephanie Clark
Stephanie Malady
Stephen Hackney
Stephen Hodges
Stephen Lillis
Stephen Padgett
Steve Fuhrmann
Steve Knockemus
Steven Benner
Steven Carter-Lovejoy
steven Koch
Steven Kranowski
Steven Nasir
Steven Vogel
Stuart Saunders
Suan McSwain
Sudhanshu Pathak
Sue Gier
Susan Bonney
Susan Bradshaw
Susan Conner
Susan D. Howell
Susan Dax
Susan Ewald
Susan Kalan
Susan Lorenzo
Susan Mccarthy
Susan Miller
Susan Pfannenbecker
Susan Posey
Susan Schorin

Name
Susan Stillman
Susan Tatum
Susan Weltz
Susann Eastridge
Susanne Ketner
Suzanne Eggeling
Suzanne Keller
Suzanne Smith Sundberg
Swami Daasyaananda
Sylvia Sevilla
T Morris
Tabitha Robinson
Tamara Prince
Tamekka Davis
Tami Palacky
Tara Kerr
Tara N. Johnson
Tara Owens
Tara Wheeler
Tasmaine Smith
Taylor Lilley (CBF)
Terence Bradshaw
Teresa B. Adkins
Teresa Bradford
Teresa McCartney
Teresa Yates
Teresa Young
Terry McGuire
Terry Sweitzer
Theo Giesy
Theodore Zook
Theresa McGuire
Theresa Morris
Theron Bailey
Thomas Burkett (River Healers)
Thomas Duval
Thomas Edmonds
Thomas Emory

ATTACHMENT B: INDIVIDUALS WHO PROVIDED PUBLIC COMMENTS GW0078700

Name
Thomas Hadwin
Thomas Huber
Thomas R. Carter
Thomas Whysall
Tia Scott
Tiffany Harville
Tim Cywinski
Tim Kennell
Tim Parmly
Tim Schmitt
Timothy Gilbert
Timothy Whitcombe
Tina Jones
Tina Rose
To-Anh Pham
Todd Powers
Tom Crockett
Tom Elliott
Tom Long
Tom Obenschain
Tom Smith
Tony Piselli
Tracy Weldon
Travis Allen
Trent Portch
Trish McLawhorn
Tyla Matteson
Tyler Demetriou
Uwe Dotzauer
Valli Shepherd
Vernon Meredith
Vernon Wong
Vicki Metcalf
Victoria Metcalf
Victoria Ronnau
Virginia Grace Abraham
Wallace C. Berg Jr.
Walt Demmerle

Name
Walter Moore
Wanda Roberts
Wanda Whitehead
Wayne Nolde
Wenda Singer
Wendy Hirsch
Wendy Macdonald
Whitney Whiting
Will Wickham
William Ceconi
William Dent
William H. Lewis
William Huddle
William Johnson
William Rogers
William Schreier
William Skirbunt-Kozabo
William Snow
William Swaine
William VanZetta
William Warder
William Warder Jr.
William Welkowitz
William Wickham
Winifred Okunlola
Yvonne Brandt
Zelma Wynn

